



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

H.A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,641	12/04/2003	Ming-Dou Ker	6720.0117-00	6205

570 7590 12/08/2006

AKIN GUMP STRAUSS HAUER & FELD L.L.P.
ONE COMMERCE SQUARE
2005 MARKET STREET, SUITE 2200
PHILADELPHIA, PA 19103

EXAMINER

BENENSON, BORIS

ART UNIT PAPER NUMBER

2836

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,641

Applicant(s)

KER ET AL.

Examiner

Boris Benenson

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4, 11, 28, 31, 39, and 44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28 and 44 is/are allowed.
- 6) ☒ Claim(s) 4, 11, 31, and 39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Actions

1. Amendment received on 9/11/2006 is entered.
 - a. Claims 4, 11, 28, 31, and 39 are amended.
 - b. Claims 1-3, 5-10, 12-27, 29-30, 40-43, and 45-47 are cancelled.
 - c. Claims 4, 11, 28, 31, 39, and 44 are pending in the Application.
 - d. Replacement set of Drawings (Figures 1A, 1B, 2A, 2B, 3A, 5A, AND 5B) is entered and approved.
 - e. The Specification is amended.

Response to the arguments

2. Applicants argue in reference to Claims 4 and 31 that Camsell et al. (5,208,968) does not show two contact members of a second length being connected to a voltage line of a voltage level, "wherein one of the at least two second contact members include one contact member connected to a first voltage line of a first voltage level, and another contact member connected to a second voltage line of a second voltage level smaller than the first voltage level". Examiner agrees that none of the figures show such limitation, but Camsell et al. teach: "To solve this

Art Unit: 2836

problem, connectors have been developed whereby selected contacts, typically ground and power contacts, mate prior to the mating of the signal contacts. This is accomplished by making the ground and power pins longer than the other pins so that they mate first" (Col.1, Lines 28-33). It is clear that longer pins (ground and power) read on second contact members will provide connections to voltage levels wherein the a power pin is connected to the power read on a first voltage level ground pin is connected to the ground read on a second voltage level and the second voltage level is smaller then the first voltage level. Claim 31 recites a method for discharging electrostatic charge from a board containing an interface device similar to the device of Claim 4 and therefore it does not provides additional limitations.

3. Applicants argue in reference to Claims 11 and 39 that Faraci (4,985,870) does not disclose a contact line directly connected to a second voltage level. The argument is not convincing, because contact line (32) of Faraci is directly connected to a second voltage level (GNG).

4. Applicants argue in reference to Claims 28 and 44 that neither Faraci nor Ziemkowski suggest "a second board including a first and a second surface" or "a plurality of second pins

Art Unit: 2836

formed on second surface of the second board" or "a plurality of second contact points formed on each of the integrated circuits to receive the second pins". The argument is convincing. Previously indicated rejection of Claims 28 and 44 is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camsell et al. (5,208,968). Camsell et al. disclose a Programmable Insertion Tool For A Pin Header. Camsell et al. disclose that "With the use of integrated circuits and other similar sensitive electronic components with protective networks, steps must be taken to prevent exposure of these sensitive elements to extraneous static charges during installation and removal of interface connections" (Col.1, Lines 17-21) and further "To solve this problem, connectors have been

Art Unit: 2836

developed whereby selected contacts, typically ground and power contacts, mate prior to the mating of the signal contacts. This is accomplished by making the ground and power pins longer than the other pins so that they mate first" (Col.1, Lines 28-33).

Camsell et al. a structure and a tool for adjusting a connector (Figs. 1-2, Pos. 10) to be coupled to a board (Fig. 2, Pos 20).

The connector comprises a plurality of pins (Figs. 2, 4-5, Pos. 16) read on contact members, which are connected to the board at one end and connector to an external device at the other end.

There are plurality of first contact members (Figs. 2, 4-5, Pos. 16) of a first length (D1) and at least two second contact members (16'', 16''') of a second length greater than the first length. According to Camsell et al. one of the second contact members should be connected to a first voltage line of a first voltage level (power level) and another second contact member should be connected to a second voltage level (ground level) which is smaller than the first voltage level.

6. Claims 11 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faraci (4,985,870) in view of Camsell et al. (5,208,968). Faraci disclosed an Apparatus For Connecting Electronic Modules Containing Integrated Circuits and Backup Batteries. The apparatus comprises an interface - connector (Pos. 22) formed on a board (Pos. 12) including a plurality of

Art Unit: 2836

first contact lines of a first length (Pos. 24), wherein one end of each of the first contact lines is connected to the board and the other end to connect to an external device (Pos. 28), a second contact line (Pos. 34) of a second length is connected to a voltage line of a first level, and a third contact line (Pos. 32) of third length is connected to a second voltage level. One end of all contact lines is aligned with an aligning line.

The second and the third length of contact lines (32 and 34) are greater than first length of contact lines (24). Faraci disclosed the apparatus for connecting a board containing an integrated circuit and backup batteries. Faraci does not disclose using the apparatus for providing electrostatic discharge protection. Camsell et al. teach that "With the use of integrated circuits and other similar sensitive electronic components with protective networks, steps must be taken to prevent exposure of these sensitive elements to extraneous static charges during installation and removal of interface connections" (Col.1, Lines 17-21) and further "To solve this problem, connectors have been developed whereby selected contacts, typically ground and power contacts, mate prior to the mating of the signal contacts. This is accomplished by making the ground and power pins longer than the other pins so that they mate first" (Col.1, Lines 28-33). It would have been obvious

Art Unit: 2836

to one of ordinary skill in the art at the time the invention was made to have use an apparatus of Faraci for electrostatic discharge protection, because according to Camsell et al. making the ground and power pins longer than the other pins so that they mate first will ensure discharge accumulated on the board charges during installation and removal of interface connections.

Allowable Subject Matter

7. Claims 28 and 44 are allowed.

The following is an examiner's statement of reasons for allowance:

8. Independent Claims 28 and 44 are allowable because none of the prior art of record disclose a detecting system, or a method of providing electrostatic discharge protection in a detecting system for integrated circuits comprising a second board with a plurality of first contact points formed on a first surface of the second board and a plurality of a second pins formed on a second surface of the second board in combination with the other claim limitations.

Art Unit: 2836

Final rejection

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Benenson whose telephone number is (571) 272-2048. The examiner can normally be reached on M-F (8:20-6:00) First Friday Off.

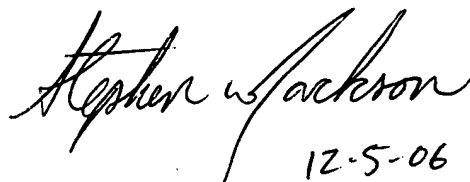
Art Unit: 2836

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 ext 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Boris Benenson
Examiner
Art Unit 2836

B.B.


12-5-06

STEPHEN W. JACKSON
PRIMARY EXAMINER